

L Number	Hits	Search Text	DB	Time stamp
1	16	surface near9 (treat\$9 modif\$9 functional\$9) near9 filler and (plasma glow discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$Ied graft\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 13:19
3	3	(amino near3 functional\$9) near9 filler same (epoxy epoxide) near9 (resin mo\$lld\$5) same (react\$5 covalent\$5 chemical\$6)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 13:23
2	5	(amino near3 functional\$9) near9 filler same (epoxy epoxide) same (react\$5 covalent\$5 chemical\$6)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 13:34
4	0	"4786415" and (epoxy epoxide)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 13:34
5	25	"4786415"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:10
6	0	"4786415" and filler	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 13:35
7	0	plasma and introduc\$4 near9 monomer near9 steel near9 pipe	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:11
9	1	plasma near9 reactor same steel near9 pipe	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:13
10	1	plasma same steel near9 pipe with monomer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:15
11	1	plasma and steel near9 pipe with monomer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:15
8	291	plasma same steel near9 pipe	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:15
12	181	plasma with steel near9 pipe	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:16

13	129	plasma near9 steel near9 pipe	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:17
14	16	(plasma same steel near9 pipe) same inject\$6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:18
15	10	(plasma with steel near9 pipe) with inject\$6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:27
16	0	"5843789" and steel	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:28
17	8	"5843789"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:29
18	0	"6428861" and steel	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 16:30
19	2	"6428861"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 17:22
20	3746	(microwave (radio near2 frequency)) near9 power near9 plasma	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 17:24
21	275	((microwave (radio near2 frequency)) near9 power near9 plasma ) near9 watt	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 17:37
22	34	((microwave (radio near2 frequency)) near9 power near9 plasma ) near9 watt) near9 ("10" "40")	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 17:25
23	30	((microwave (radio near2 frequency)) near9 power near9 plasma ) near9 ("10" "40") near3 watt	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 20:00
24	384	(plasma glow discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$led graft\$5) near9 power	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 17:36

25	354	plasma near9 (polymeri\$ation polymeri\$ing polymeri\$led graft\$5) near9 power	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 17:36
26	43	( plasma near9 (polymeri\$ation polymeri\$ing polymeri\$led graft\$5) near9 power ) near9 watt	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 17:37
27	2	4374717.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 20:00
-	350	(yoon roh).in. and plasma	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:10
-	1	((yoon near3 tae-ho) (roh near3 joon)).in. and plasma	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:04
-	9	(kwangju).as. and plasma	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:08
-	34	((yoon roh).in. and plasma) and silica	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:08
-	1512	(kwangju).as.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:08
-	34	((yoon roh).in. and plasma)((kwangju).as. )) and plasma and silica	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:10
-	16091	(yoon roh).in.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:10
-	17557	((kwangju).as. )(yoon roh).in. )	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:10
-	121	((kwangju).as. )(yoon roh).in. )) and plasma same (silica (silicon (dioxide oxide)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:13

-	1	((kwangju).as. )((yoon roh).in. ) and plasma same (silica (silicon (dioxide oxide))) same modif\$6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:12
-	102	( (plasma near9 polymeri\$8) same (silica (silicon (dioxide oxide))) ) same modif\$8	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:20
-	56	( (plasma near9 polymeri\$8) same (silica (silicon (dioxide oxide))) ) same (surface near3 modif\$8)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:23
-	1	(( (plasma near9 polymeri\$8) same (silica (silicon (dioxide oxide))) ) same (surface near3 modif\$8)) same (particle particulate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:20
-	358	(plasma near9 polymeri\$8) same (silica (silicon near2 (dioxide oxide)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:27
-	20	( (plasma near9 polymeri\$8) same (silica (silicon near2 (dioxide oxide))) ) same (particle particulate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:20
-	18	( (plasma near9 polymeri\$8) same (silica (silicon near2 (dioxide oxide))) ) same modif\$8	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:20
-	13	(plasma near9 polymeri\$8) and (silica (silicon near2 (dioxide oxide))) near9 (surface near3 modif\$8)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:24
-	5	( (plasma near9 polymeri\$8) same (silica (silicon near2 (dioxide oxide))) ) same (surface near3 modif\$8)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:24
-	4	427/488.ccls. and (silica (silicon near2 (dioxide oxide))) near9 modif\$9	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:28
-	4	427/488.ccls. and (silica (silicon near5 (dioxide oxide))) near9 modif\$9	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:34
-	16078	plasma and (silica (silicon near5 (dioxide oxide))) and (amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 09:30

-	552	plasma near9 (polymeri\$9 graft\$5) and (silica (silicon near5 (dioxide oxide))) and (amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:37
-	539	(silica (silicon near5 (dioxide oxide))) and (amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) same plasma	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:38
-	274	(silica (silicon near5 (dioxide oxide))) same (surface substrate) and (amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) same plasma	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 09:55
-	44	(silica (silicon near5 (dioxide oxide))) same (surface substrate) same (amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) same plasma	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:44
-	18	(silica (silicon near5 (dioxide oxide))) same (surface substrate) and (amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) with plasma with polymeri\$9	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/08 19:45
-	0	(plasma discharge glow) same (polymeri\$9 graft\$5) same (monomer amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) and (silica (silicon near5 (dioxide oxide)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 09:32
-	3764	(silica (silicon near5 (dioxide oxide))) near9 (particle particulate) same surface near9 (treat\$9 modif\$9)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:56
-	409	((silica (silicon near5 (dioxide oxide))) near9 (particle particulate) same surface near9 (treat\$9 modif\$9) ) and (amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) and (plasma glow discharge)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:00
-	19	((silica (silicon near5 (dioxide oxide))) near9 (particle particulate) same surface near9 (treat\$9 modif\$9) ) and (amine diamino\$9 allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) and (plasma glow discharge) near9 (polymeri\$1ation polymer\$2ing graft\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:20
-	2	"2000143230"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:09
-	5270	(silica (silicon near5 (dioxide oxide))) near9 (particle particulate bead) near9 (treat\$9 modif\$9)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:19
-	0	((silica (silicon near5 (dioxide oxide))) near9 (particle particulate bead) near9 (treat\$9 modif\$9) ) and (diamino\$1propane diamino\$1alkane allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) and (plasma glow discharge) near9 (polymeri\$1ation polymer\$2ing graft\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:21

-	51	(diamino\$1propane diamino\$1alkane allyl\$1amine pyrrole allyl\$1mercaptan allyl\$1alcohol) same (plasma glow discharge) near9 (polymeri\$1ation polymer\$2ing graft\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:22
-	3321	(epoxy glycidyl) near5 resin same (amin\$1 mercapto hydroxy\$1) same (covalent\$6 chemical\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:49
-	533	(epoxy glycidyl) near5 resin same (amin\$1 mercapto hydroxy\$1) same (covalent\$6 chemical\$4) near5 (react\$8 bond\$6 attach\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:50
-	146	(epoxy glycidyl) near9 resin near9 (amin\$1 mercapto hydroxy\$1) near9 (covalent\$6 chemical\$4) near9 (react\$8 bond\$6 attach\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:51
-	148	(epoxy glycidyl) near9 (mo\$1ld\$3 resin) near9 (amin\$1 mercapto hydroxy\$1) near9 (covalent\$6 chemical\$4) near9 (react\$8 bond\$6 attach\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:53
-	2	((epoxy glycidyl) near9 (mo\$1ld\$3 resin) near9 (amin\$1 mercapto hydroxy\$1) near9 (covalent\$6 chemical\$4) near9 (react\$8 bond\$6 attach\$4)) not ((epoxy glycidyl) near9 resin near9 (amin\$1 mercapto hydroxy\$1) near9 (covalent\$6 chemical\$4) near9 (react\$8 bond\$6 attach\$4))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 10:55
-	3358	surface near9 (treat\$9 modif\$9) near9 (filler particle particulate) and (silica (silicon near5 (dioxide oxide))) and mo\$1ld\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 11:12
-	58	surface near9 (treat\$9 modif\$9) near9 (silica (silicon near5 (dioxide oxide))) near9 filler same mo\$1ld\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 11:01
-	19	(surface near9 (treat\$9 modif\$9) near9 (silica (silicon near5 (dioxide oxide))) near9 filler same mo\$1ld\$4) same epoxy	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 11:01
-	695	surface near9 (treat\$9 modif\$9) near9 (filler particle particulate) and (silica (silicon near5 (dioxide oxide))) and mo\$1ld\$4 and (plasma glow discharge)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 12:21
-	32	surface near9 (treat\$9 modif\$9) near9 (filler particle particulate) near9 (plasma glow discharge) and (silica (silicon near5 (dioxide oxide))) and mo\$1ld\$4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 11:32
-	0	surface near9 (treat\$9 modif\$9) near9 filler same (plasma glow discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$led graft\$5) and (silica (silicon near5 (dioxide oxide)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 11:41

-	4	filler with (plasma glow discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$led graft\$5) and (silica (silicon near5 (dioxide oxide)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 12:21
-	4	surface near9 (treat\$9 modif\$9) near9 filler and (plasma glow discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$led graft\$5) and (silica (silicon near5 (dioxide oxide)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 11:45
-	2	rotat\$5 near9 reactor near9 plasma same (parcticle particulate)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 11:47
-	13	rotat\$5 near9 reactor and (plasma glow discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$led graft\$5) same (filler parcticle particulate powder\$4)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 11:50
-	1	surface near9 (treat\$9 modif\$9) near9 filler with (plasma glow discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$led graft\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 12:23
-	15	filler with (plasma glow discharge) near9 (polymeri\$ation polymeri\$ing polymeri\$led graft\$5)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/01/09 17:33

DERWENT-ACC-  
NO: 1993-402433

DERWENT-  
WEEK: 199350

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TITLE: Polymeric compsn. - contains polyolefin and modified inorganic filler, useful in  
mfr. of domestic and industrial articles

INVENTOR: MATKOVSKII, P E; PAPOYAN, A T ; RUDAKOV, V

PATENT-  
ASSIGNEE: MATKOVSKII, P E PAPOYAN, A T RUDAKOV, V M AS USSR CHEM  
PHYS INST[ASCHR]

PRIORITY-DATA: 1990SU-4880079 (November 5, 1990)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
SU 1776671 A1	November 23, 1992	N/A	005	C08L 023/02

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
SU 1776671A1	N/A	1990SU-4880079	November 5, 1990

INT-CL (IPC): C08F292/00, C08K009/04 , C08L023/02

ABSTRACTED-PUB-NO: SU 1776671A

BASIC-ABSTRACT:

The compsn. contains in wt. %: modified inorganic filler 20-40; and polyolefin the rest. The filler is modified by polymerisation of saturated and unsaturated hydrocarbons in high-frequency discharge onto the surface of inorganic particles in 0.048-2.120 pts.wt. of polymer to 17.88-39.24 pts.wt. of inorganic filler.

In the examples the filler is from the group contg. technical carbon, graphite, calcite, tafa, kaolin, silicagel, etc. The modification is in thermostat reactor with outer electrodes connected by flexible screened conductors of length 40 cm to generator of frequency 40.68 MHz. Pressure is reduced to 1 Pa by vacuum-pump, the reactor is filled with argon to 0.1 MPa, then argon is pumped out, and the discharge of specific power 0.53 W/cu.cm started in the zone of 0.2 l; ethylene at 20 deg.C in 30 mins. is fed into the discharge zone by capillary at the rate of 0.13 m.mol/min. Modified filler is combined with high-pressure polyethylene in laboratory microrollers at temp. 125 +/-5 deg.C in 5 mins.

USE/ADVANTAGE - Used in filled polyolefin compsns. in the industry of plastic materials that are useful in prodn. of domestic and industrial articles. The physico-mechanical properties are improved. Bul.43/23.11.92

Syntactic foams are produced by dispersing microscopic rigid, hollow or solid particles in a liquid or semi-liquid thermosetting resin and then hardening the system by curing. The particles are generally spheres or microballoons of carbon, polystyrene, phenolic resin, urea-formaldehyde resin, glass, or silica, ranging from 20 to 200 micrometers in diameter. Commercial microspheres have specific gravities ranging from 0.033 to 0.33 for hollow spheres and up to 2.3 for solid glass spheres. The liquid resins used are the usual resins used in molding reinforced articles, e.g., epoxy resin, polyesters, and urea-formaldehyde resins.

PAT-NO: JP401113454A  
DOCUMENT-IDENTIFIER: JP 01113454 A  
TITLE: PRODUCTION OF EPOXY COMPOSITION  
PUBN-DATE: May 2, 1989

## INVENTOR-INFORMATION:

NAME COUNTRY  
HAYASHI, TAKAO

## ASSIGNEE-INFORMATION:

NAME COUNTRY  
MATSUSHITA ELECTRIC WORKS LTD N/A

APPL-NO: JP62271051  
APPL-DATE: October 26, 1987

INT-CL (IPC): C08L063/00 , C08K009/06  
US-CL-CURRENT: 523/213

## ABSTRACT:

**PURPOSE:** To obtain an epoxy resin composition which can give a cured product of a low modulus, by surface-treating a silica powder to be added to an epoxy resin molding material as a filler by reaction with an epoxysilane and then with an aminosilane and adding this filler to an epoxy resin.

**CONSTITUTION:** A surface-treated silica [A] is added to an epoxy resin in the production of an epoxy resin composition including a step of adding a silica powder to an epoxy resin, said surface-treated silica [A] is one formed by reacting the surface of a silica powder with an epoxysilane of formula I and then with an aminosilane of formula II and hydrolyzing the alkoxy groups of the aminosilane. In formulas I and II, R is CH<sub>3</sub> or C<sub>2</sub>H<sub>5</sub>, R<sub>1</sub> is a radical containing an epoxy group, and R<sub>2</sub> is a radical containing an amino group.

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PAT-NO: JP363130625A  
DOCUMENT-IDENTIFIER: JP 63130625 A  
TITLE: EPOXY RESIN COMPOSITION FOR SEALING SEMICONDUCTOR DEVICE  
PUBN-DATE: June 2, 1988

## INVENTOR-INFORMATION:

NAME	COUNTRY
FUJIEDA, SHINETSU	
HIRAI, HISASHI	
MATSUMOTO, KAZUTAKA	

## ASSIGNEE-INFORMATION:

NAME	COUNTRY
TOSHIBA CORP	N/A

APPL-NO: JP61276634  
APPL-DATE: November 21, 1986

INT-CL (IPC): C08G059/18 , C08G059/18 , C08G059/18 , C08K005/54 , C08K009/06 ,  
C08L063/00 , H01L023/30

US-CL-CURRENT: 523/210

## ABSTRACT:

**PURPOSE:** To obtain the title composition excellent in heat shock resistance and adhesion of a lead frame to an element, containing an inorganic filler treated with a specified surface treating agent.

**CONSTITUTION:** 100pts.wt. inorganic filler (a) (e.g., silica) is treated with 0.1 ~ 5 pts.wt. surface treating agent (b) comprising a silane coupling agent (i) (e.g., an epoxy silane coupling agent), a liquid organosiloxane (ii) of a viscosity (20°C) of 500 ~ 1,000,000cP and 0.05 ~ 10pts.wt., per 100pts.wt. component (ii), radical polymerization initiator (iii) (e.g., benzoyl peroxide) to obtain a surface-treated inorganic filler (B). A composition (A) comprising an epoxy resin, a curing agent (accelerator), a mold release, etc., is mixed with component B to obtain the title composition. This composition can be cured by heating to 150°C or above.

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PAT-NO: JP401185316A  
DOCUMENT-IDENTIFIER: JP 01185316 A  
TITLE: EPOXY RESIN MOLDING MATERIAL  
PUBN-DATE: July 24, 1989

## INVENTOR-INFORMATION:

NAME	COUNTRY
IKEDA, KOJI	
KAGAWA, HIROHIKO	
TORII, MUNETOMO	

## ASSIGNEE-INFORMATION:

NAME	COUNTRY
MATSUSHITA ELECTRIC WORKS LTD	N/A

APPL-NO: JP63008002  
APPL-DATE: January 18, 1988

INT-CL (IPC): C08G059/40 , C08L063/00  
US-CL-CURRENT: 523/456

## ABSTRACT:

**PURPOSE:** To obtain the title low-stress material of excellent moldability, by mixing an epoxy resin with an inorganic filler, a silicone rubber and, optionally, a crosslinking agent, a curing agent, a cure accelerator, a mold release, a colorant, etc.

**CONSTITUTION:** A curable epoxy resin (A) having at least two epoxy groups in the molecule is mixed with 30-90wt.% inorganic filler (B) (e.g., silica) option ally surface-treated with a coupling agent and, optionally, 0.5-10wt.% silicone rubber (C) surface-treated with a coupling agent in an amount of 0.05-5wt.% [in terms of the total amount of this coupling agent and the coupling agent used in the surface treatment of component (B)], based on the obtained material, and, optionally, a crosslinking agent, a curing agent, a cure accelerator, a mold release, a colorant, etc., (D).

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DERWENT-  
ACC-NO: 2000-406990

DERWENT-  
WEEK: 200050

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TITLE: Modification of spherical shaped silica particle surface for use as catalyst support,  
involves coating the surface of silica particles with a graft polymer layer

PATENT-ASSIGNEE: HARAGUCHI T[HARAI] , SHOKUBAI KASEI KOGYO KK[NISH]

PRIORITY-DATA: 1998JP-0319573 (November 10, 1998)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 2000143230 A	May 23, 2000	N/A	006	C01B 033/18

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO	APPL-DATE
JP2000143230A	N/A	1998JP-0319573	November 10, 1998

INT-CL B01J002/00, B01J019/08 , C01B033/18 , C08F292/00 , C08K003/36 , C08K009/04 ,  
(IPC): C08L101/00

ABSTRACTED-PUB-NO: JP2000143230A

BASIC-ABSTRACT:

NOVELTY - The surface of spherical shaped silica particle is modified by coating with a graft polymer layer. The silica particle has a bulk specific gravity of 0.8-1.2 g/ml, pore volume of 0.3 ml/g or less, abrasion strength of 10 weight percentage/15 hours or less and average particle diameter of 20-300  $\mu$ m.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for manufacture of surface modified spherical particle. The surface of spherical shaped silica particles is irradiated with plasma without exposing the particle to atmosphere. Then, the silica particles are made to contact with monomer and graft polymerization was carried out to form a monomer layer on the surface of silica particle.

USE - As catalyst support.

ADVANTAGE - The surface of silica particle is modified by providing a polymer layer by graft polymerization reaction. Therefore, the need of silane coupling process is eliminated.

CHOSEN-DRAWING: Dwg.0/1

DERWENT-CLASS: A14 E36 G02